

REMARKS

Claim amendments

Applicant amends claims 1 and 22 to clarify the recitation of the range-finder.

Additional claims

Applicant submits new independent claim 48 and new claims 49-58, all of which depend ultimately on claim 48. Claim 48 recites subject matter similar to that recited in claim 1.

Objection to drawing

Applicant acknowledges the omission of reference numeral "10" from FIG. 1. Attached is a replacement drawing with the reference numeral. Support for the change can be found throughout the specification, for example, on page 6.

Section 102(b) rejection of claim 1

As best understood, the claimed actuator is considered to correspond to either the piezoelectric elements 104, 106 shown in FIGS. 10-11 or the coil 80 shown in FIG. 9 of *Grendahl*.¹ The claimed lens would then correspond to the lens optic 12 in combination with a composite overlay material 24 having an index of refraction that can be made to change, either by application of a field, as discussed in connection with FIG. 9, or by application of a force, as discussed in connection with FIGS. 10 and 11.

The Office appears to concede that there is in fact no express teaching in *Grendahl* of a rangefinder or a controller having the limitations set forth in the claims. Rather, it is the Office's position that the rangefinder and the controller are inherent in the teaching of *Grendahl*.

In *Ex parte Levy*, the Board indicated that

"[i]n relying upon the theory of inherency, the examiner must provide a basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristic *necessarily* flows from the teachings of the applied prior art."²

¹ *Grendahl*, U.S. Patent No. 4,787,903.

² *Ex parte Levy*, 17 USPQ 2d 1461, 1464 (Bd. Pat. App. & Inter. 1990).

More recently in *Akamai v. Cable & Wireless*, the Federal Circuit has ratified the Board's position by stating that "[a] claim limitation is inherent in the prior art if it is necessarily present in the prior art, not merely probably or possibly present."³

It appears therefore, that a rejection is proper in this case if and only if the claimed rangefinder and controller are the only possible rangefinder and controller that could possibly "flow from the teaching" of *Grendahl*. If there exists even a single rangefinder of controller that can be said to "flow from" *Grendahl*, a rejection based on inherency would be improper.

Applicant submits that the statement in the office action that

"[m]annual focusing and rangefinder are inherently provided by the user through the piezoelectric means." is insufficient to meet this burden.

It is simply not the case that the combination of a rangefinder and controller "*necessarily* flows from the teachings of" *Grendahl*. *Grendahl* teaches that pressing on the piezoelectric material causes the index of refraction of the composite material to change.⁴ This does not lead *necessarily* to the claimed rangefinder and controller.

As but one example, one can conceive of controlling the *Grendahl* device by simply pressing it with one's finger.

In Applicant's claimed invention, a rangefinder estimates a distance to an object-of-regard and provides it to a controller. The controller then causes the index of refraction to change appropriately.

Applicant's rangefinder and controller cooperate to automatically determine the distance to an object-of-regard and to automatically change the index of refraction of a lens in response. This avoids the need to place a finger on one's eye to focus a lens. Applicant's claimed invention thus frees both hands for other uses, and eliminates the danger of accidents in which a finger

³ *Akamai Technologies v. Cable & Wireless Internet Services*, 344 F. 3d 1186, 68 USPQ 2d 1186 (Fed. Cir. 2003).

⁴ *Grendahl*, col. 3, lines 10-16.

momentarily exerts a force far in excess of what is required to focus the lens. A combination of a rangefinder and controller of this type does not *necessarily* flow from *Grendahl*'s teaching.

Claims 3-8, 10-11, 14-16, and 31 all ultimately depend on claim 1 and are therefore allowable for at least the reasons set forth above in connection with claim 1.

Section 102(b) rejection of claim 22

Claim 22 stands rejected as being anticipated by *Grendahl* for reasons identical to those advanced for anticipation of claim 1. As claim 22 includes the actuator and rangefinder recited in claim 1, Applicant refers to the discussion of the distinction between the teaching of *Grendahl* and the actuator and rangefinder recited in claim 1.

The rangefinder recited in claim 22 has the additional limitation of

“a transducer for detecting a stimulus from an anatomic structure in an eye”

The office action omits any reference to a teaching in *Grendahl* of such a transducer. Nor does the office action advance any basis for why such a structure might be inherent from the teaching of *Grendahl*.

Claim 22 also stands rejected as being anticipated by *Piosenka*.⁵ As best understood, the Office considers the “transducer” recited in claim 22 to be met by the cornea tracker 76 shown in FIG. 12.

According to *Piosenka*, the “secondary cornea tracking system 76 is used to measure the orientation of the eye by an infrared signal reflected from the cornea.”⁶ The resulting signal “provides information about the temporal location of the line of vision.”⁷ As best understood from this text, the cornea tracker 76 tells the computer system 71 which way the user is looking.

Applicant draws attention to the following language in claim 22:

“a transducer for detecting a stimulus from an anatomic structure in an eye, *said stimulus being indicative of a range to said object-of-regard*”

⁵ *Piosenka*, et al. U.S. Patent No. 5,359,444

⁶ *Piosenka*, col. 6, lines 4-6.

⁷ *Piosenka*, col. 6, lines 8-9.

Apparently, the cornea tracker 76 does not detect a stimulus that is in any way indicative of a *range* to an object of regard. Instead, the cornea tracker 76 detects a stimulus indicative of a *direction* to an object of regard.

Direction and range are qualitatively different. Knowing the direction of one's gaze does not provide any information whatsoever on the range to an object-of-regard. For example, one may stare straight ahead at a computer monitor a foot away, or at a star many light years away. The *direction* is the same in both cases, yet the difference in *range* is quite literally, astronomical.

Since *Piosenka* and *Grendahl* both fail to teach each and every limitation of claim 22, the section 102(b) rejection is improper. Accordingly, Applicant requests that it be withdrawn.

Claims 23-24 and 27-29 all depend on claim 22 and are allowable for at least the same reasons.

Summary

Now pending in this application are thirty claims: 1, 3-8, 10-11, 14-16, 22-24, 27-29, 31, and 48-58. Of these, claims 1, 22, and 48 are independent. Applicant encloses a fee for claims in excess of twenty. No additional fees are believed to be due in connection with the filing of this response. However, to the extent fees are due, or if a refund is forthcoming, please adjust our deposit account 06-1050, referencing attorney docket "00633-030002."

Respectfully submitted,



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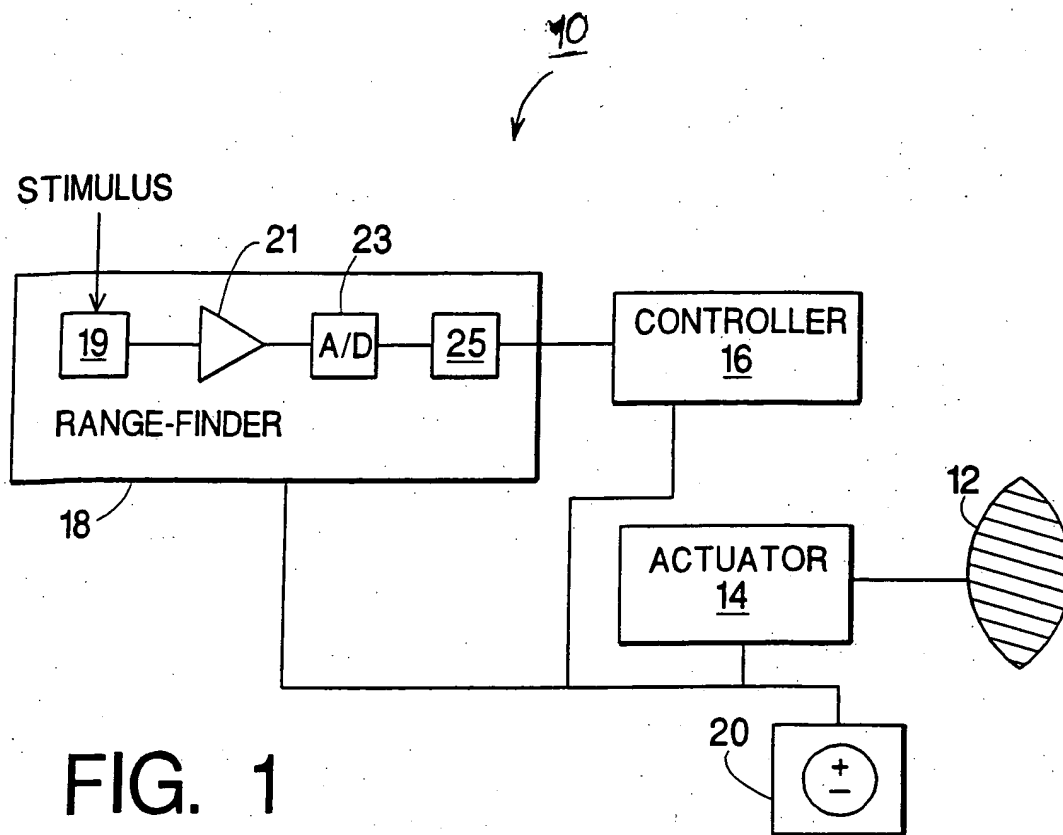
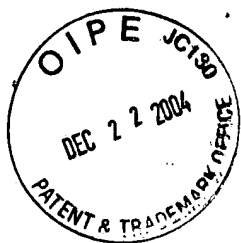


FIG. 1

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Amendments to the Drawings:

The attached replacement sheet of drawing includes changes to Fig. 1 and replaces the original sheet.